This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A flow sensor comprising:

a light emitter placed at a first end of a housing;

a light detector placed at a second end of the housing;

the housing defining a flow path in which a fluid moves in a general direction from one of the first and second ends of the housing to the other of the first and second ends of the housing; and

a diaphragm member placed in a the flow path between the emitter and the detector, the diaphragm member opening upon flow through the flow path such that light from the emitter is detected by the detector, the diaphragm member closing upon a low pressure condition in the flow path such that not as much light from the emitter is detected by the detector.

Claim 2 (original): The flow sensor of Claim 1, wherein the light emitter is selected from the group consisting of: a light emitting diode, an infrared light emitter, a fiber optic source and any combination thereof.

Claim 3 (original): The flow sensor of Claim 1, wherein the light detector is selected from the group consisting of: a phototransistor, an infrared light detector, a photodiode, a photovoltaic cell and any combination thereof.

Claim 4 (currently amended): The flow sensor of Claim 1, wherein the diaphragm member includes a characteristic selected from the group consisting of: ~~being spring loaded,~~ being flexible, being resilient, being naturally biased, ~~being hinged,~~ including a septum and any combination thereof.

Claim 5 (currently amended): The flow sensor of Claim 1, ~~which includes a housing that houses the emitter, the detector and~~ wherein the diaphragm member is opaque.

Claim 6 (original): The flow sensor of Claim 1, which includes first and second housings, the emitter positioned in the first housing, the detector positioned in the second housing and the member coupled between the first and second housings.

Claim 7 (original): The flow sensor of Claim 1, which includes at least one electrical component operating with the light emitter or detector, the component selected from the group consisting of: an integrated circuit, a power regulator, an indicating light, a resister, a transistor, a diode and any combination thereof.

Claim 8 (original): The flow sensor of Claim 1, which includes a first output indicative of a fluid flow state and a second output indicative of a low pressure state.

Claim 9 (original): The flow sensor of Claim 1, which includes an output that ranges depending on a relative amount of fluid flowing through the flow path.

Claim 10 (original): The flow sensor of Claim 1, wherein the member is configured to close upon a low pressure condition in the flow path such that light from the emitter is not detected by the detector.

Claim 11 (original): The flow sensor of Claim 1, wherein the low pressure condition is a zero pressure condition or a less than a cracking pressure condition.

Claim 12 (currently amended): A flow sensor comprising:

a diaphragm member placed in a flow path within a housing, the housing having first and second ends and configured such that the flow path extends in a general direction from the first end to the second end, the diaphragm member including a stationary portion and an openable portion;

an emitter located at one of the first and second ends;

a receiver located at the other of the first and second ends;

a first output state caused via operation of the emitter and receiver when the openable portion resides in a first position, the first output state indicative of a first flow state; and

a second output state caused via operation of the emitter and receiver when the openable portion resides in a second position, the second output state indicative of a second flow state.

Claim 13 (currently amended): The flow sensor of Claim 12, wherein the emitter is a light emitter and the receiver is a light receiver, and wherein the first output state is a no/low light detect state and the first flow state is a no/low pressure state.

Claim 14 (original): The flow sensor of Claim 12, wherein the first output state is a de-energized state and the first flow state is a no/low pressure state.

Claim 15 (original): The flow sensor of Claim 12, wherein the first output state is a bottom of an output range state and the first flow state is a no/low pressure state.

Claim 16 (original): The flow sensor of Claim 12, wherein the first output state is a no electrical flow state and the first flow state is a no/low pressure state.

Claim 17 (currently amended): The flow sensor of Claim 12, wherein the emitter is a light emitter and the receiver is a light receiver, and wherein the second output state is a light detected state and the second flow state is a fluid flowing state.

Claim 18 (original): The flow sensor of Claim 12, wherein the second output state is an energized state and the second flow state is a fluid flowing state.

Claim 19 (original): The flow sensor of Claim 12, wherein the second output state is a top of an output range state and the second flow state is a full flow state.

Claim 20 (original): The flow sensor of Claim 12, wherein the second output state is an intermediate output of an output range state and the second flow state is an intermediate flow state.

Claim 21 (original): The flow sensor of Claim 12, wherein the first fluid flow state is a non-alarm state and the second fluid flow state is an alarm state.

Claim 22 (original): The flow sensor of Claim 12, wherein the first fluid flow state is an alarm state and the second fluid flow state is a non-alarm state.

Claim 23 (original): The flow sensor of Claim 12, wherein the openable portion is moved from the first position to the second position based on a flow of fluid past the member, the fluid being liquid or gaseous.

Claim 24 (currently amended): A medical fluid system comprising:

a valve operable to enable fluid to be delivered to a patient;

a sensor including ~~an openable~~ an emitter, a receiver, and a member having an openable portion, the member placed in ~~a~~ and held around its perimeter by a housing, the openable portion residing within the perimeter of the member, the housing defining a flow path in fluid communication with the valve; and

a control scheme operable to signal an alarm based on whether the member resides in a first or a second position and an expected opened/closed state of the valve.

Claim 25 (original): The medical fluid system of Claim 24, wherein the fluid is selected from the group consisting of: dialysate, blood and any combination thereof.

Claim 26 (original): The medical fluid system of Claim 24, wherein the valve is operable to enable fluid to be delivered to the patient's peritoneal cavity or to a blood corporeal circuit.

Claim 27 (original): The medical fluid system of Claim 24, wherein the member is opened from the first position to the second position based on a flow of the fluid past the member.

Claim 28 (original): The medical fluid system of Claim 24, wherein the fluid is a first fluid, and wherein the member is moved by a second fluid.

Claim 29 (currently amended): A flow sensing method comprising the steps of:

establishing a first flow state when an openable portion of a diaphragm member located in a fluid flow path resides in a first position, the diaphragm member and fluid flow path located within a housing, the housing having first and second ends and configured such that the fluid flow path extends in a general direction from the first end to the second end;

locating a source at one of the first and second ends;

locating a receiver at the other of the first and second ends; and

establishing a second fluid flow state when a force due to a flow of a fluid through the path causes the openable portion of the diaphragm member to move to a second position, changing a level of communication between the source and receiver.

Claim 30 (original): The flow sensing method of Claim 29, wherein establishing the first flow state includes determining that a low pressure condition exists.

Claim 31 (original): The flow sensing method of Claim 29, wherein establishing the second flow state includes determining that the fluid is flowing within the flow path.

Claim 32 (currently amended): The flow sensing method of Claim 29, wherein the source is a light source and the receiver is a light receiver, and wherein establishing the first flow state includes detecting at least a relatively low amount of light from a light source and establishing the second flow state includes detecting a relatively high amount of light from the light source.

Claim 33 (original): The flow sensing method of Claim 29, wherein establishing the first flow state includes not making an electrical connection and establishing the second flow state includes making the electrical connection.

Claim 34 (original): The flow sensing method of Claim 29, wherein establishing the first flow state includes making an electrical connection and establishing the second flow state includes unmaking the electrical connection.

Claim 35 (original): The flow sensing method of Claim 29, which includes disabling at least one flow component by establishing the first fluid flow state.

Claim 36 (original): The flow sensing method of Claim 29, which includes enabling at least one flow component by establishing the second fluid flow state.

Claim 37 (original): The flow sensing method of Claim 29, which includes enabling at least one flow component by establishing the first fluid flow state.

Claim 38 (original): The flow sensing method of Claim 29, which includes disabling at least one flow component by establishing the second fluid flow state.